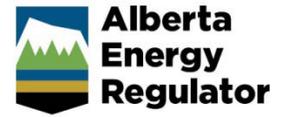


Importing Digital Spatial Data into OneStop Public Land Dispositions



» Intended User: Public Land applicants

Overview

This quick reference guide (QRG) gives an overview of the use of shapefiles for public land disposition applications. For details on how each shapefile is used in a OneStop application, please refer to our video tutorials.

To apply for a public land disposition, applicants must upload a boundary shapefile of the public land and, when applicable, a CAD file. CAD files must comply with the Government of Alberta's Plan Confirmation Service (PCS) Digital Plan Submission Standards and Procedures User Guide.

For RTF (regulator temporary field) authorizations, a CAD file is not required.

All shapefiles submitted to the AER must contain polygon features and must conform to the shapefile standards outlined in the white paper ESRI Shapefile Technical Description.

Shapefile templates can be downloaded in OneStop. They are also available from the AER by contacting the Customer Contact Centre.

Important:

The shapefile template was updated on March 2020. It contains additional optional attributes that aid in automatically updating the application by using the data contained in the shapefile.

If any of the optional data included in these fields is incorrect, the shapefile will have to be updated to include the correct data.

If the optional data is not included in the shapefile the user interface may add the information.

Disposition Polygon Topology Rules

1. Log in to OneStop.
2. The boundary polygon data represents the overall area of the disposition and is related to the disposition-type description.
 - a) OneStop uses the boundary polygon to determine the quarter sections that are to be included in the public notice of application.

- b) When a public land disposition application includes a water approval as part of an integrated application, OneStop will use the boundary shapefile to identify the water approval activity area.

Important:

When creating your polygon shapefiles, be aware that the polygons **must not intersect or self-overlap**.

Users should check the validity of their shapefile submissions against these parameters before uploading them to OneStop.

Digital Spatial Data

Shapefile

Digital spatial data for the disposition boundary is uploaded as a shapefile. This file contains spatial location data and consists of several files, collectively uploaded as a zip file.

Your individual zip file folders may be labelled based on your own business rules.

For example: The zip folder you set up to store these files may follow your company's naming conventions:

RTF application (project).zip
MSL and LOC application (project).zip

Boundary zip contents can have any label and must consist of a minimum four, file extension types as shown below.

Disposition.dbf
Disposition.prj
Disposition.shp
Disposition.shx

Important:

Boundary shapefile names must be **less than 40 characters** and **must not contain any special characters**.

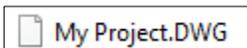
CAD File

Digital spatial data for ATS and adjacent disposition information, including the boundary polygon, is uploaded as a CAD file. This single file contains the spatial location data in layers.

Important:

The CAD file must not include a regulator temporary field (RTF) authorization boundary.

Your CAD file may be named in accordance with your own business rules.



Upload the Disposition Area as Digital Spatial Data (Shapefile)

1. Log in to OneStop.
2. From the dashboard, use the search criteria to find the required application.
3. Click **Initiate > New Application**.
4. Provide information for each General screen.
5. On the **General – Activity Details** screen, click **Add** under Public Land Dispositions.
6. Select **Lands Disposition(s)**.

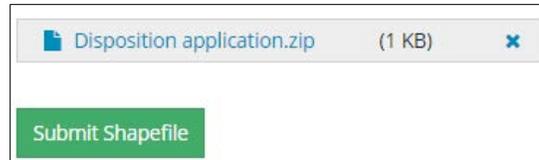
7. Click **Next**.
8. Select **Attach**.

9. Navigate to the stored location of the required file.



10. Double-click to select and upload the file.

The shapefile appears in OneStop.



11. Click **Submit Shapefile**.

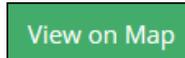
OneStop processes the file. This takes 10–30 seconds, depending on the file size.



12. While the file is being processed, continue with the application.
13. Once the file is loaded into Map Viewer, the information appears in the Public Lands Disposition table.

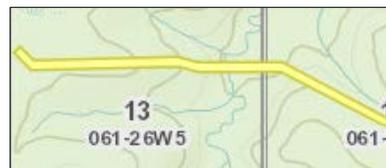
View Shapefile Info	Relate Activity or Disposition	Associate Plan	Related Activity Information		
<input checked="" type="checkbox"/>	Shapefile Name	Unique ID	Disposition Type	Purpose	Activity
<input checked="" type="checkbox"/>	Disposition	1	AER License of Occupation	Access	Class II - All Weather or Dry
<input checked="" type="checkbox"/>	Disposition	2	AER Mineral Surface Lease	Wellsite	PNG Production (SW)

14. Optional: Click **View on Map**.



15. To submit the CAD file, proceed to Step 18.
16. Select the dispositions to map. Click **Map It!** The AER logo displays as the Map Viewer opens.

Once loaded, the shapefile area is displayed.



17. Use the Map Viewer tools to zoom in or out as required.

Important:

If you need to change a shapefile that is currently attached to a draft authorization, upload a **new** file containing the changes.

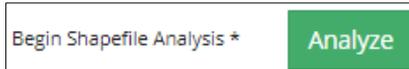
OneStop overwrites the old file and enters the new file into **Map Viewer**.

Upload the ATS, Adjacent and Boundary Information as Digital Spatial Data (CAD File)

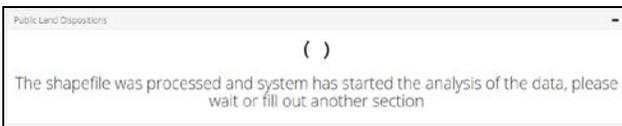
18. On the **Public Lands – Overview** screen, select a **Purpose** and **Activity** for each disposition in the table.

Purpose ▾	Activity ▾
Access ▾	Class II - All Weather or Dry ▾
Wellsite ▾	PNG Production (SW) ▾

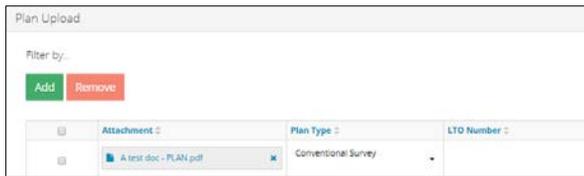
19. Click **Analyze** to start the land intersection analysis.



OneStop performs the analysis. This takes 10–30 seconds, depending on the file size.



20. When the analysis is complete, navigate to the Plan Upload pane.
21. Click **Add** to attach a survey plan or sketch and a CAD file with the ATS and adjacent disposition information.



22. Click **Attach File** under Attachment.
23. Navigate to the stored location of the required file.
24. Double-click to select and upload the file.
25. Select a **Plan Type**.
26. Optional: Enter the **LTO (Lands Title Office) Number**.
27. Select a **Geo Reference Type**.
28. Enter the **Combined Scale Factor**.
29. Click **Attach File** under the CAD File column.
30. Navigate to the stored location of the required file.



31. Double-click to select and upload the file. The CAD file appears in OneStop.
32. Repeat as required so that each uploaded plan has the CAD file attached.

Resources

For more information on the process for submitting public land disposition applications, please see the help videos.

Appendix

OneStop Automated Shapefile Validations

OneStop automatically checks public land boundary shapefiles to confirm that the following items are correct and generates an error message when they are not:

- The shapefile features fall within the geographic extents of the Province of Alberta.
- All attributes described in this QRG, including the order of the attribute fields, are included in the shapefile submission.
- All mandatory fields, as described in this QRG, are included in the shapefile submission.
- The shapefile coordinate system has the same parameters as described later in this QRG.
- Mandatory fields have the correct data type as described in this QRG.
- Polygons do not overlap (they can be disconnected, touch at a point, or touch along an edge).

OneStop Spatial Data

- The AER requires that all spatial data submissions be submitted in compliance with the ESRI shapefile standards.
- RTF polygons should be generated in accordance with existing mapping standards.
- Boundary polygons must be coincident to ATS v4.1 for all formal dispositions.
- For optimal results, users should geo-reference their data to the DIDS (digital integrated dispositions) layer or to the base features ATS v4.1.
- All spatial data submissions need to be referenced to the NAD83 datum and projected to the following:

NAD 1983 10TM AEP Forest	NAD 1983 CSRS 10TM AEP Forest
NAD_1983_10TM_AEP_Forest WKID: 3400 Authority: EPSG Projection: Transverse Mercator False Easting: 500000.0 False Northing: 0.0 Central Meridian: -115.0 Scale Factor: 0.9992 Latitude of Origin: 0.0 Linear Unit: Meter (1.0) Geographic Coordinate System: GCS_North_American_1983 Angular Unit: Degree (0.0174532925199433) Prime Meridian: Greenwich (0.0) Datum: D_North_American_1983 Spheroid: GRS_1980 Semi-major Axis: 6378137.0 Semi-minor Axis: 6356752.314140356 Inverse Flattening: 298.257222101	NAD_1983_CSRS_10TM_AEP_Forest WKID: 3402 Authority: EPSG Projection: Transverse Mercator False Easting: 500000.0 False Northing: 0.0 Central Meridian: -115.0 Scale Factor: 0.9992 Latitude of Origin: 0.0 Linear Unit: Meter (1.0) Geographic Coordinate System: GCS_North_American_1983_CSRS Angular Unit: Degree (0.0174532925199433) Prime Meridian: Greenwich (0.0) Datum: D_North_American_1983_CSRS Spheroid: GRS_1980 Semi-major Axis: 6378137.0 Semi-minor Axis: 6356752.314140356 Inverse Flattening: 298.257222101

Disposition and RTF Polygon Information

Feature Name: Boundary

Description: Information describing the limits or boundaries of the disposition or RTF boundary polygon.

Geometry: Polygon

Disposition and RTF Attributes:

Field name	Type	Allowable values	Mandatory or optional	Definition
FID	Object ID	System Defined	Mandatory	<ul style="list-style-type: none"> Unique identifier
Shape	Geometry	System Defined	Mandatory	<ul style="list-style-type: none"> Spatial feature
Unique_ID	Short	A value of one or greater	Mandatory	<ul style="list-style-type: none"> A unique number to define the polygon
Disp_Type	Text	See PLAR Table A2	Mandatory	<ul style="list-style-type: none"> Three-letter disposition code set by the provincial government for that disposition type
Rel_Unq_ID	Short/Long	Zero or Unique_ID in the shapefile	Mandatory	<ul style="list-style-type: none"> Zero for formal polygons or standalone RTFs, or if related to another polygon in the shapefile, the Unique_ID of the formal polygon
Purpose	Text	See OneStop shapefile PLAR Table A2 .csv file	Optional	<ul style="list-style-type: none"> Disposition purpose as defined in the PLAR Table A2 Value must match exactly to the format in the OneStop Shapefile PLAR A2.csv available on the OneStop web site
Activity	Text	See OneStop shapefile PLAR Table A2 .csv file	Optional	<ul style="list-style-type: none"> Disposition activity as defined in the PLAR Table A2 Value must match exactly to the format in the OneStop Shapefile PLAR A2.csv available on the OneStop web site
Area_Ha	Double	Numeric to 3 decimal places 0 (zero) = no data	Optional	<ul style="list-style-type: none"> Numeric value to three decimals, this value must match the area identified for the activity identified on the survey plan, attached to the application This value will populate the RTF area and populate the total area in the dimensions section In the dimensions section the area must equal new cut plus existing cut. If the value is zero, the system will treat it as no data and the actual area value must be updated in the user interface.
Confl_Free	Text	Yes/No	Optional *	<ul style="list-style-type: none"> Yes - means there are no outstanding conflicts No - indicates concerns, overlaps, consents, or clearances related to the activity are still outstanding * Only pertains to RTF Applicable Incidental activity
Adjoi_Dis	Text	Yes/No	Optional *	<ul style="list-style-type: none"> Yes - means the activity adjoins to and shares a boundary with the related formal disposition identified in the application or an approved adjoining disposition as defined in the PLAR Approvals and Authorizations Administrative Procedures No - means the activity does not adjoin the related formal disposition and does not share a boundary as defined in the PLAR Approvals and Authorizations Administrative Procedures * Only pertains to RTF Applicable Incidental activity

Field name	Type	Allowable values	Mandatory or optional	Definition
Space_Reqm	Text	Yes/No	Optional *	<ul style="list-style-type: none"> • Yes - means the activity meets the predetermined spacing identified for the purpose/activity as defined in the PLAR Approvals and Authorizations Administrative Procedures • No - means the activity does not meet the predetermined spacing identified for the purpose/activity as defined in the PLAR Approvals and Authorizations Administrative Procedures • * Only pertains to RTF Applicable Incidental activity
Sur_Pln_ID	Text	User Defined (25)	Optional	<ul style="list-style-type: none"> • Survey Plan ID relates the survey plan PDF to the disposition. This name must match the name of the PDF document uploaded to the system.

Disposition Topology and Business Rules

- Each entry must have a Unique_ID of one or greater:
 - Unique_ID must be unique throughout the shapefile.
 - Non-contiguous disposition applications must be submitted as a multipart polygon.
- Each Rel_Unq_ID must have a value that is zero or greater:
 - Zero value indicates a formal disposition or that the polygon is not related to another polygon in the shapefile.

For example:

FID	Shape	Unique_ID	Disp_Type	Rel_Unq_ID	Purpose	Activity	Area_Ha	Confl_Free	Adjoi_Dis	Space_Reqm	Sur_Pln_ID
0	Polygon	1	MSL	0	PNG or OS Facility	Central Processing F...	0	Yes	No	Yes	123456

- Otherwise, the value must match the Unique_ID of another polygon (of a formal disposition) in the same shapefile, establishing a relationship to the formal disposition.

For example:

FID	Shape	Unique_ID	Disp_Type	Rel_Unq_ID	Purpose	Activity	Area_Ha	Confl_Free	Adjoi_Dis	Space_Reqm	Sur_Pln_ID
0	Polygon	1	MSL	0	PNG or OS Facility	Central Processing F...	0.25	Yes	Yes	Yes	123456
5	Polygon	2	LOC	0	Access	Class II - All Weather...	0.75	Yes	Yes	Yes	123456
11	Polygon	3	RTF	1	Incidental Activity	Log Deck	0.15	Yes	Yes	Yes	
12	Polygon	4	RTF	1	Incidental Activity	Log Deck	0.15	Yes	Yes	Yes	
17	Polygon	5	RTF	0	Incidental Activity	Incidental Activity	0.1	Yes	Yes	Yes	

- Multiple polygons can have the same value for Rel_Unq_ID, indicating that they all relate to the same formal polygon.

- RTF polygons that are related to pre-existing dispositions will need a Rel_Unq_ID of zero and the relationship to the existing disposition must be defined later in the application.

Important:

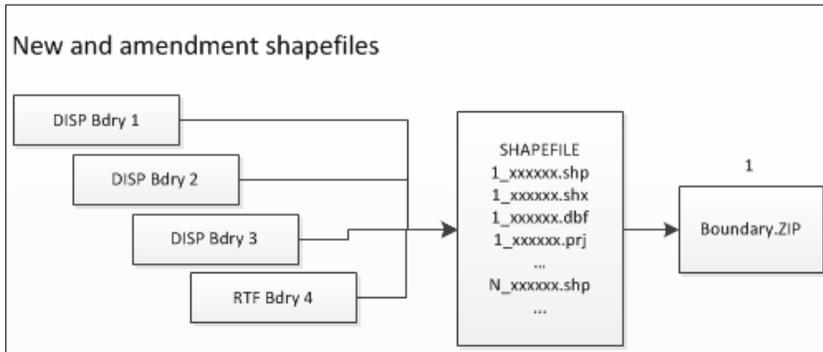
- Unique_ID must be 1 or greater for all boundary shapefile uploads.
- Rel_Unq_ID must be 0 for formal polygons or standalone RTFs, or the same as the Unique_ID of the related formal polygon.

Packaging Information

Each shapefile type must be included in its own zip file. It is very important that each uploaded zip file have a unique name. If a zip file has been attached to an application and the file is to be replaced prior to submission, then the applicant will have to rename the zip file. The system will not accept zip files that have the same name as previously uploaded zip files.

New and Amendment Disposition Applications

1. The boundary shapefile may contain the entire set of formal dispositions and RTF polygons included in the application.
2. The boundary zip file may contain more than one shapefile.
3. Each number beside “ZIP” in the diagrams below indicates the individual zip files that are required for new and amendment disposition applications.



4. The CAD file must be uploaded for each sketch or survey plan included in the application. The CAD files cannot be packaged together with other files.

Important:

For an amendment, the shapefile must only contain the polygon for the disposition being amended and, if applicable, the associated disposition as well as any new related incidental activity (RTF). The associated disposition polygon needs to be included only if it is also being amended and the association is being maintained.

Plan Replacement Submissions

A CAD file, *not* a boundary shapefile, is needed when submitting a plan replacement. The CAD file must be uploaded separately when submitting the plan replacement; the two files cannot be packaged together.